

REMARKS AND ARGUMENTS

Claims 1, 3 and 7-12 are pending in the present application, of which claims 1, 9 and 10 are independent. Claims 2 and 4-6 have been cancelled. Claims 1, 3, 7, 8 and 10 have been amended. Support for the amendments to the claims, and for new claims 11-12 is found in the specification on page 8.

Claims 1-10 were rejected under 35 U.S.C. § 103(a) as unpatentable over Antoni-Zimmerman et al. Applicants respectfully traverse this rejection.

Independent claims 1, 9 and 10 include the specific ratios of 2-methyl-3-isothiazolone to each of the recited second components. Although the reference discloses a large number of substances which can be combined with 2-methyl-3-isothiazolone and 1,2-benzisothiazolin-3-one (see columns 3-4), the Office Action acknowledges that it does not teach the exact ranges of biocide ratios recited in the present claims. However, even in cases where a claimed range actually overlaps with a prior art range or is contained within it, a finding of obviousness still may be rebutted by demonstrating unexpected results relative to the prior art disclosure. See M.P.E.P. § 2144.05(III). Synergistic interaction between molecules always is unexpected, and neither its existence nor the composition ranges over which two molecules will exhibit synergistic interaction can be predicted. Applicants have demonstrated (see pages 10-21) that the claimed biocide combinations display synergistic activity (synergy index < 1) within the claimed ranges of biocide ratios, and accordingly, they have demonstrated unexpected results for these biocide combinations. Therefore, the claims cannot be obvious over the disclosure of the references, and the rejection should be withdrawn.

Moreover, the reference does not disclose combinations comprising 2-methyl-3-isothiazolone and zinc pyrithione, climbazole or citric acid, as recited in claims 7, 8 and 11, respectively.

On page 8, the Office Action requests an explanation of "what was unexpected." As described in the specification on page 9, lines 1-20, synergy has been demonstrated for a mixture when the synergy index ("SI") is less than 1. The tables on pages 10-21 demonstrate that the claimed combinations have an SI < 1 at many ratios within the claimed ranges. It is not possible to predict whether a combination will display synergy at all, and if it does, over which range it will occur. The Office Action objects to the fact that the claims are not limited to the organisms for which synergy is demonstrated. However, Applicants are claiming a composition, and any demonstration of unexpected benefit for that composition is sufficient to overcome a *prima facie* case of obviousness. It is not necessary to demonstrate synergy of the composition with respect to every possible organism;

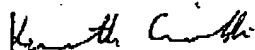
this would be impossible in practice and would make synergistic compositions unpatentable.

Claims 1, 2, 7, 9 and 10 were provisionally rejected for obviousness-type double patenting over claim 1 of copending Application No. 11/265,654 ("645 application"). Applicants respectfully point out that claim 1 of the '654 application, unlike the present claims, does not recite any combinations containing 2-methyl-3-isothiazolone, and does not recite any biocide ratios. Accordingly, this claim cannot render the present invention obvious. Moreover, Applicants cannot "present[] claims corresponding to those of the instant application in the other copending application," as alleged in the Office Action, because the biocide combinations claimed in the present application are not disclosed in the '654 application.

Applicants do not understand why the paragraph titled "Information Disclosure Statement" on page 3 of the Office Action was included. Applicants have filed Information Disclosure Statements, and the Office Action contained copies of the PTO-1449 forms with the Examiner's acknowledgment that the references were considered. Applicants have not relied upon a list "incorporated into the specification."

Applicants believe that the foregoing amendments and arguments have overcome the rejection. However, if the Examiner has any further objections to the application, Applicants respectfully request that the Examiner contact Applicants' undersigned attorney by telephone at (847) 649-3891 to discuss the remaining issues.

Respectfully submitted,



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